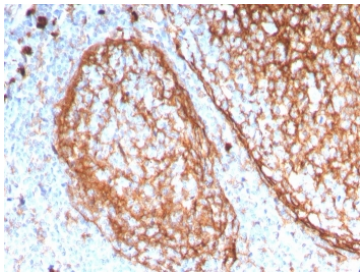
CD11b Antibody ITGAM/3338 / ITGAM Monoclonal Antibody [clone ITGAM/3338] (V8357)

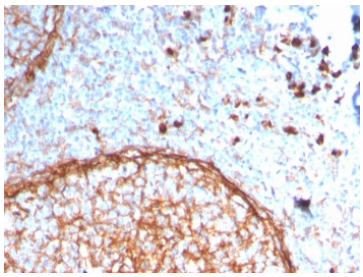
Catalog No.	Formulation	Size
V8357-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8357-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8357SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

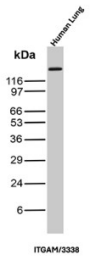
Availability	1-3 business days
Species Reactivity	Human, Mouse, Guinea pig
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	ITGAM/3338
Purity	Protein G affinity chromatography
UniProt	P11215
Localization	Cell membrane, cytoplasm
Applications	Western blot: 1-2ug/ml (Human/Mouse/Guinea pig) Immunohistochemistry (FFPE): 1-2ug/ml (Human)
Limitations	This CD11b Antibody ITGAM/3338 / ITGAM Monoclonal Antibody is available for research use only.



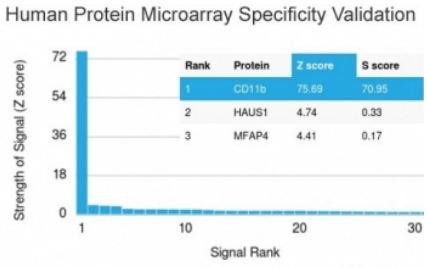
CD11b Antibody ITGAM/3338 in Human Tonsil by IHC. Immunohistochemistry of FFPE human tonsil stained with CD11b Antibody ITGAM/3338 after heat-induced epitope retrieval by boiling in 10 mM Tris with 1 mM EDTA at pH 9 for 20 min, followed by cooling. Brown staining outlines cells within the tissue, consistent with detection of ITGAM by this monoclonal antibody.



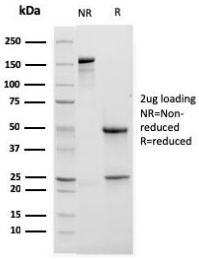
CD11b Antibody ITGAM/3338 at the Human Tonsil Follicle Edge by IHC. Immunohistochemistry of a second FFPE human tonsil field stained with CD11b Antibody ITGAM/3338 after heat-induced epitope retrieval by boiling in 10 mM Tris with 1 mM EDTA at pH 9 for 20 min, followed by cooling. Brown cellular staining is prominent along the edge of the follicular region, providing another view of ITGAM detection with clone ITGAM/3338.



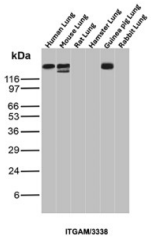
CD11b Antibody ITGAM/3338 in Human Lung by WB. Western blot of human lung lysate probed with CD11b Antibody ITGAM/3338 shows a prominent band above the 116 kDa marker, approximately within the expected 127-170 kDa range for CD11b. Variation in glycosylation can affect the apparent molecular weight of ITGAM detected by this monoclonal antibody.



CD11b Antibody ITGAM/3338 Protein Microarray Validation. HuProt protein microarray analysis of more than 19,000 full-length human proteins shows CD11b as the highest-ranked signal, with a Z-score of 75.69 and an S-score of 70.95. The Z-score expresses signal strength in standard deviations above the array's mean signal; the S-score measures separation between the leading signal and the next-ranked protein. The large separation from HAUS1 and MFAP4 supports the specificity of this Protein Microarray Validated ITGAM Monoclonal Antibody.



CD11b Antibody ITGAM/3338 Purity by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free CD11b Antibody ITGAM/3338 under non-reducing (NR) and reducing (R) conditions. The non-reduced preparation shows a principal band near 150 kDa, while reduction yields bands near 50 and 25 kDa, consistent with antibody heavy and light chains. This image assesses the integrity of the purified ITGAM monoclonal antibody rather than binding to CD11b.



CD11b Antibody ITGAM/3338 in Lung Tissue Lysates by WB. Western blot of lung tissue lysates from human, mouse, rat, hamster, guinea pig, and rabbit probed with CD11b Antibody ITGAM/3338. Prominent bands in the expected high-molecular-weight region are visible in the human, mouse, and guinea pig lanes; corresponding bands are not evident in the rat, hamster, or rabbit lanes in this image. The band positions are broadly consistent with glycosylated ITGAM detected by this monoclonal antibody.

Description

CD11b Antibody ITGAM/3338 / ITGAM Monoclonal Antibody recognizes integrin alpha M, the protein encoded by ITGAM. CD11b pairs with the beta 2 integrin subunit CD18 to form a cell surface receptor known as MAC-1 or complement receptor 3 (CR3). CD11b names the alpha subunit, while MAC-1 and CR3 name the assembled CD11b/CD18 complex. This distinction helps describe the protein detected by an antibody without treating one subunit as the entire receptor.

MAC-1 participates in leukocyte adhesion and movement through tissues. Its interactions with ligands on other cells and in the surrounding environment help immune cells attach, migrate, and maintain contact during inflammatory responses. Receptor behavior depends on more than the presence of CD11b: activation and organization at the cell surface can

change the strength of an adhesive interaction. Measurements of ITGAM expression and MAC-1 function therefore address related but distinct questions.

CD11b is associated with several myeloid cell populations, including monocytes, macrophages, and granulocytes. It is also widely used in research on microglia, the resident immune cells of the central nervous system. Its presence can help characterize these populations, although identifying a cell type generally requires consideration of other markers and the biological setting. Changes in CD11b expression may accompany altered immune cell recruitment or activation, but expression alone does not define a cell's functional state.

The CD11b/CD18 complex binds complement-opsonized material and contributes to its uptake by phagocytic cells. This role gives rise to the complement receptor 3 name. CD11b also belongs to the CD11 family of alpha integrin subunits. Other family members can pair with CD18, yet each assembled receptor has its own ligand interactions and biological roles. Using the ITGAM designation identifies CD11b specifically when comparing related beta 2 integrins.

An ITGAM Monoclonal Antibody provides a clone-defined reagent for examining this alpha subunit. NSJ Bioreagents offers clone ITGAM/3338 for research on CD11b and its place in leukocyte biology. The relationship among CD11b, ITGAM, MAC-1, and CR3 provides context for studying adhesion and complement-associated responses while keeping the alpha chain distinct from the complete receptor.

A CD11b Antibody ITGAM/3338 / ITGAM Monoclonal Antibody can help researchers examine integrin alpha M in studies of myeloid cells, immune cell adhesion, and phagocytosis.

Explore our Macrophage Antibodies page for additional reagents used to study myeloid cell markers and functions.

Application Notes

Optimal dilution of the CD11b Antibody ITGAM/3338 / ITGAM Monoclonal Antibody should be determined by the researcher.

Immunogen

A recombinant human partial protein (amino acids 941-1074) was used as the immunogen for this CD11b Antibody ITGAM/3338.

Storage

Store the CD11b Antibody ITGAM/3338 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

ITGAM monoclonal antibody, integrin alpha M antibody, MAC-1 alpha chain antibody, CR3 alpha chain antibody

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